

## WHAT IS CLAIMED IS:

1. A refrigerator comprising:
  - a refrigeration cycle which a compressor, a condenser, a capillary, an evaporator, and an accumulator are connected to, and in which an inflammable refrigerant is included;
  - a detector for detecting a leak of the refrigerant;
  - an alarming device for giving an alarming signal warning against the refrigerant leak when the refrigerant leak is detected by the detector; and
  - a controller for causing the alarming device to stop giving an alarming signal after a door of a storage compartment is opened.
2. The refrigerator according to Claim 1, wherein the alarming device is caused to stop giving an alarming signal after all the doors are opened.
3. A refrigerator comprising:
  - a refrigeration cycle which a compressor, a condenser, a capillary, an evaporator, and an accumulator are connected to, and in which an inflammable refrigerant is included;
  - a duct for sending cold air which has been cooled by the evaporator to at least the storage compartments including a refrigerator compartment and a freezer compartment;
  - a damper, which is arranged in the duct, for adjusting an amount of the cold air which is being sent;
  - a detector for detecting a leak of the refrigerant;
  - an alarming device for giving an alarming signal warning against the refrigerant leak when the refrigerant leak is detected by the detector; and
  - a controller for causing the alarming device to stop giving an alarming signal after a door of a storage compartment into which the cold air flows after the damper is opened.
4. The refrigerator according to any one of Claims 1-3, wherein the detector detects a refrigerant leak in the compartment.
5. A refrigerator comprising;
  - a refrigerating space and a freezing space which are formed in a way

that the storage space in the main body of the refrigerator is sectioned off by a partition wall;

a refrigeration cycle which a compressor, a condenser, capillaries and evaporators for the refrigerating space and the freezing space, and an accumulator are connected to in a way that the refrigerating space and the freezing space are capable of being controlled independently for refrigeration, and in which an inflammable refrigerant is included;

a detector for detecting a refrigerant leak in each of the refrigerating space and the freezing space;

an alarming device for giving an alarming signal warning against the refrigerant leak when the refrigerant leak is detected by the detector; and

a controller for causing the alarming device to stop giving an alarming signal after a door of a compartment in one of the refrigerating space and the freezing compartment in which the refrigerant leak is detected by the detector is opened.

6. The refrigerator according to any one of Claims 1-5, wherein the alarming device is caused to stop giving an alarming signal after the door is left open longer than a prescribed length of time.

7. The refrigerator according to any one of Claims 1-6, wherein, after the door is opened and the alarming device is caused to stop giving an alarming signal, the alarming device is caused to give an alarming signal again in the case that the door is closed while in the state that time for which the door has been left open is shorter than a prescribed length of time, or the alarming device is caused to continue giving no alarming signal in the case that the door is opened while in the state that time for which the door has been left open is longer than a prescribed length of time.

8. The refrigerator according to any one of Claims 1-7, further comprising an auxiliary power supply for causing the alarming device to continue giving an alarming signal in the case that the power supply is turned off.

9. The refrigerator according to any one of Claims 1-8, wherein, in the case that the power supply is turned off and again on while the alarming

device is caused to be giving an alarming signal, the alarming device is caused to resume giving an alarming signal.

10. A refrigerator comprising:

a refrigeration cycle which a compressor, a condenser, a capillary, an evaporator, and an accumulator are connected to, and in which an inflammable refrigerant is included;

a detector for detecting a leak of the refrigerant;

an alarming device for giving an alarming signal warning against the refrigerant leak after a prescribed length of time has passed in the case that the refrigerant leak is detected by the detector.

11. The refrigerator according to Claim 10, wherein a described length of time is defined as a time which it takes for the concentration of the refrigerant to come to be lower than the concentration of inflammation while the leaked refrigerant diffuses out of a compartment.

12. A refrigerator comprising:

a refrigeration cycle which a compressor, a condenser, a capillary, an evaporator, and an accumulator are connected to, and in which an inflammable refrigerant is included;

a detector for detecting a leak of the refrigerant;

an alarming device for giving an alarming signal warning against the refrigerant leak when a refrigerant leak is no longer detected after the refrigerant diffuses in the case that the refrigerant leak is detected by the detector.

13. The refrigerator according to any one of Claims 10-12, wherein control for taking action against the refrigerant leak is performed from a time when the detector detects the refrigerant leak through a time when the alarming device is caused to give an alarming signal.

14. The refrigerator according to any one of Claims 10-13, further comprising a memory device for memorizing a record regarding a refrigerant leak when the refrigerant leak is detected by the detector, and hold the record regarding the refrigerant leak even though the power supply is turned

off, wherein the alarming device is caused to give an alarming signal after a prescribed length of time has passed following the turning on of the power supply in the case that the record regarding the refrigerant leak is being placed in the memory device when the power supply is turned on.

15. The refrigerator according to Claim 14, wherein the memory device can remove the record regarding the refrigerant leak.

16. The refrigerator according to any one of Claims 10-15, further comprising a memory device for memorizing an alarm record when the alarming device is caused to give an alarming signal, and hold the alarm record even though the power supply is turned off,

wherein the alarming device is caused to start giving an alarming signal when the power supply is turned on in the case that the alarm record is being placed in the memory device when the power supply is turned on.

17. The refrigerator according to Claim 16, wherein the memory device can remove the alarm record.

18. The refrigerator according to any one of Claims 1-17, wherein the detector detects that a refrigerant has leaked, and the alarming device gives an alarming signal informing that the refrigerant has leaked.

19. The refrigerator according to any one of Claims 1-17, wherein the detector detects in advance that a refrigerant is to leak, and the alarming device is caused to give an alarming signal informing that the refrigerant is to leak.